

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region I - EPA New England

Drafted Date: October 28, 2011

Finalized Date:

SUBJECT: Partial Compliance Evaluation of Sprague Terminal in Quincy, MA

FROM: Elizabeth Kudarauskas, Environmental Engineer, Air Technical Unit

THRU: Christine Sansevero, Senior Enforcement Coordinator, Air Technical Unit

TO: File

I. Facility Information

A. Facility Name: Sprague

B. Facility Location: 728 Southern Artery, Quincy, MA

C. Facility Mailing Address: same

D. Facility Contact: Elizabeth Hernberg, E H & S Manager

E. AFS #: 2511901014

II Background Information

A. Date of inspection: August 4, 2011

B. Weather Conditions: Sunny, approx. 80's

C. US EPA Representative(s):

Beth Kudarauskas, OES Air Tech Unit

Bill Osbahr, OEME

Mike Looney, OEME

D. State Representative(s):

none

III Purpose of Inspection

The purpose of this inspection was to gather information to evaluate the facility's compliance with environmental regulations pertaining to air, including state permitting requirements, with an emphasis on potential VOC emissions from the storage of #6 oil and asphalt.

IV Facility Description

A. Company / Facility History:

Sprague is a wholly owned subsidiary of Axel Johnson Inc., a member of the Axel Johnson Group of Stockholm, Sweden. The company was incorporated on 10/9/1987 in the state of Delaware. Sprague owns and operates a bulk fuel distribution terminal with loading rack in

Quincy, MA. Sprague also owns another facility near the Quincy Terminal, known as the Twin River Terminal facility (TRT). The TRT facility is separate from the Quincy Terminal.

V Inspection

A. Entry:

The inspectors entered the facility at approximately 9:00 am. Ms. Kudarauskas showed her credentials to the terminal security.

B. Opening Conference:

The inspectors were joined by Ms. Hernberg (EH&S Manager) of Sprague for the opening conference. The inspectors explained that they were there to conduct an inspection of the facility to evaluate compliance with air regulations. Ms. Kudarauskas made clear that the inspectors were not conducting a full compliance evaluation. The inspectors explained that they planned to spend some time at the facility asking questions, touring the facility, and using leak detection equipment including a FLIR camera and TVA 1000. Results from the leak monitoring and the FLIR camera will be included as an attachment to this report when available from OEME. Ms. Fortin expressed security concerns with the inspectors taking photos and video.

Ms. Hernberg provided the inspectors with a facility map (Attachment A) to facilitate the discussion. The Sprague Quincy Terminal operates a new dock that was installed around 2000. #6 oil is received via the terminal dock, however the facility is equipped to accept truck deliveries.

Most of the product at the terminal is not owned by Sprague. The Sprague Quincy Terminal has one large tank of #6 oil (Tank 11).

Tank #	Product Stored	Shell Capacity (bbls)	Safe-Fill (bbls)	Capacity (gals)	Safe-Fill (gals)	Date Operational	#6 Oil Stored on 8/4/11 (bbls)
11	6 Oil (0.5% sulfur)	83,000	77,900	3,486,000	3,271,800	1945	39,000

Quincy Throughput, Gallons

	2006	2007	2008	2009	2010
#6 Oil	12,420,460	10,930,167	9,451,215	7,545,450	2,542,280

Sprague's Quincy Terminal has a vapor collection system that collects vapors from the #6 oil tank vents routes them to a carbon bed. The vapor collection system operates during tank filling

and when the wind is blowing in certain directions. The primary purpose of the vapor collection system is odor control. The Quincy Terminal has a meter that senses wind direction. When the wind is blowing in certain directions (towards the neighbors) the vapor collection system automatically turns on. Facility representatives stated that the unit is on most of the time.

In addition to the #6 oil, Sprague's Quincy Terminal also stores ULSD, JP5 (gov't jet fuel), ULS kerosene, LSD and #2 oil. The Quincy Terminal has a boiler that burns #2 oil. The boiler is used to heat the #6 oil tank.

C. Plant Walkthrough

Facility representatives showed the inspectors the wind meter that is used to automatically control the #6 oil vapor collection system and carbon bed. Based on the wind direction the vapor collection system and carbon bed were operating at the time of the inspection.

The inspectors then saw the carbon bed. The unit was operating and Mr Osbahr was able to take some readings with the TVA 1000. At the exhaust of the carbon bed Mr Osbahr was able to detect 575 ppm to 609 ppm. Mr Looney was able to record video with the FLIR camera of the carbon bed exhaust. Ms Kudarauskas detected some VOC odors in the area of the carbon bed.

The inspectors climbed to the top of Tank 11, which contains #6 oil. Mr Looney was able to view the center tank hatch with the FLIR camera. With the tank hatch closed, Mr Osbahr was not able to detect any emissions with the TVA 1000. The facility representative explained that because the vapor collection system was operating, the tank should be under a slight negative pressure. Mr Looney also viewed the tank hatch with the FLIR camera.

While on top of Tank 11, Mr Looney was able to scan other tanks at the facility for emissions using the FLIR camera. Using the FLIR camera, Mr Looney was able to observe a plume being emitted from a pipe on a nearby tank. Facility representatives identified the tank as Tank 6 and the pipe to be part of the fire suppression system. Tank 6 contains #2 oil.

D. Record Review and Closing Conference

In the office, Ms. Kudarauskas was provided with the tank information requested during the inspection (tank level, capacity, and temperature). The inspectors thanked the facility representatives for their time and cooperation.

The inspectors left the facility at approximately 11:00 am.